

Re-run



THIS IS SC

S. Sieuw

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/651,150B

DATE: 11/12/2002

TIME: 16:54:27

Input Set : N:\paola\US09651150B.raw

Output Set: N:\CRF4\11122002\I651150B.raw

1 <110> APPLICANT: Payan, Donald  
 2 <120> TITLE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING  
 3 <130> FILE REFERENCE: RIGL-002CON  
 C--> 4 <140> CURRENT APPLICATION NUMBER: US/09/651,150B  
 5 <141> CURRENT FILING DATE: 2000-08-30  
 6 <150> PRIOR APPLICATION NUMBER: US 09/050,861  
 7 <151> PRIOR FILING DATE: 1998-03-30  
 8 <160> NUMBER OF SEQ ID NOS: 35  
 9 <170> SOFTWARE: PatentIn version 3.1  
 11 <210> SEQ ID NO: 1  
 12 <211> LENGTH: 1911  
 13 <212> TYPE: DNA  
 14 <213> ORGANISM: Homo sapiens  
 15 <400> SEQUENCE: 1  
 16 aaaggagtaa gcagcgtgtc tccatcccc tctctagggg ctcttggatg gaccttgcac 60  
 17 tctagaaggg acaatggact tctggctttg gccactttac ttccctgccag tatcaggggc 120  
 18 cctgaggatc ctcccagaag taaaggtaga gggggagctg ggcggatcaq ttaccatcaa 180  
 19 atgcccaactt cctgaaatgc atgtgaggat atatctgtgc cgggagatgg ctggatctgg 240  
 20 aacatgtggt accgtggtat ccaccaccaa cttcatcaag gcagaataaca agggccgagt 300  
 21 tactctgaag caataccac gcaagaatct gttccttagtg gaggttaacac agctgacaga 360  
 22 aagtgcacgc ggagtctatg cctgcggagc gggcatgaac acagaccgg gaaagaccca 420  
 23 gaaagtccacc ctgaatgtcc acagtgaata cgagccatca tggaaagagc agccaatgcc 480  
 24 tgagacttcca aaatggtttc atctgcctta tttgttccag atgcctgtcat atgccagttc 540  
 25 ttccaaattc gtaaccagag ttaccacacc agctcaaagg ggcagggtcc ctccagttca 600  
 26 ccactcctcc cccaccaccc aaatcaccca ccgcgcotcga gtgtccagag catcttcagt 660  
 27 agcaggtgac aagccccgaa ctttcctgcc atccactaca gcctcaaaaaa tctcagctct 720  
 28 ggaggggctg ctcaagcccc agacgcccag ctacaaccac cacaccaggc tgcacaggca 780  
 29 gagagcactg gactatggct cacagtctgg gagggaaggc caaggatttc acatcctgat 840  
 30 cccgaccatc ctgggccttt tctctgtggc acttctgggg ctgggttgtga aaaggccgt 900  
 31 tgaaaggagg aaagccctct ccaggcgccc ccgcccactg gccgtgagga tgcgcgccct 960  
 32 ggagagctcc cagaggcccc ggggtcgcc ggcacccgc tccaaaaca acatctacag 1020  
 33 cgcctgccc cggcgccgtc gtggagcggc cgctgcaggc acaggggagg ccccggttcc 1080  
 34 cggcccccggc ggcgcgttgc ccccccggcc gctgcagggtg tctgaatctc cctggctcca 1140  
 35 tgccccatct ctgaagagcca gctgtgaata cgtgacccctc taccaccagg ctgcgcct 1200  
 36 gatggaggac agtgatttcg atgactacat caatgttct gcctgacaaac tcccaagcta 1260  
 37 tcccccaacc ccaggctcgg actgtgggtc caaggagtct catctatctg ctgatgtcca 1320  
 38 atacctgtttt catgtgttct cagagccctc atcacttccc atgccccatc tcgactccca 1380  
 39 tccccatcta tctgtggccc tgagcatggc tctgccccca ggtcgtctt cacaccttgg 1440  
 40 cagccccctg tagttgacag gtaagctgta ggcgtttaga gcaattgtcc caatgccact 1500  
 41 tgcttccttt ccaagccgtc gaacagactg tgggatttgc agagtgttc ttccatgtct 1560  
 42 ttgaccacag ggtgttggc ctgcccaggct ctagatcaca tggcatcagg ctggggcaga 1620  
 43 ggcatacgta ttgtctcggg catccctccc agggttgggt cttagacacaa tagaaggctc 1680  
 44 ttgctctgag ttatgtgacg tgcctcagcc ccatggacta agcagggtgc tggatataaac 1740

ENTERED

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45      actcctggaa acgccttgc cctgatccaa atgttagcac ttgctagtga acgtctactt      1800
46      atctcaagtt ctatgctaaa ggcaatttat cttgatgtga tgataaacca aacttattag      1860
47      caagatatgc atatatatcc ataaattctc tttactctgt ctccatcctt t      1911
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 390
51 <212> TYPE: PRT
52 <213> ORGANISM: Homo sapiens
53 <400> SEQUENCE: 2
      Met Asp Arg Trp Leu Trp Pro Leu Tyr Phe Leu Pro Val Ser Gly Ala
      1           5           10          15
      Leu Arg Ile Leu Pro Glu Val Lys Val Glu Gly Glu Leu Gly Gly Ser
      20          25          30
      Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
      35          40          45
      Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
      50          55          60
      Thr Asn Phe Ile Lys Ala Glu Tyr Lys Gly Arg Val Thr Leu Lys Gln
      65          70          75          80
      Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
      85          90          95
      Ser Asp Ser Gly Val Tyr Ala Cys Gly Ala Gly Met Asn Thr Asp Arg
      100         105         110
      Gly Lys Thr Gln Lys Val Thr Leu Asn Val His Ser Glu Tyr Glu Pro
      115         120         125
      Ser Trp Glu Glu Gln Pro Met Pro Glu Thr Pro Lys Trp Phe His Leu
      130         135         140
      Pro Tyr Leu Phe Gln Met Pro Ala Tyr Ala Ser Ser Ser Lys Phe Val
      145         150         155         160
      Thr Arg Val Thr Thr Pro Ala Gln Arg Gly Lys Val Pro Pro Val His
      165         170         175
      His Ser Ser Pro Thr Thr Gln Ile Thr His Arg Pro Arg Val Ser Arg
      180         185         190
      Ala Ser Ser Val Ala Gly Asp Lys Pro Arg Thr Phe Leu Pro Ser Thr
      195         200         205
      Thr Ala Ser Lys Ile Ser Ala Leu Glu Gly Leu Leu Lys Pro Gln Thr
      210         215         220
      Pro Ser Tyr Asn His His Thr Arg Leu His Arg Gln Arg Ala Leu Asp
      225         230         235         240
      Tyr Gly Ser Gln Ser Gly Arg Glu Gly Gln Gly Phe His Ile Leu Ile
      245         250         255
      Pro Thr Ile Leu Gly Leu Phe Leu Leu Ala Leu Leu Gly Leu Val Val
      260         265         270
      Lys Arg Ala Val Glu Arg Arg Lys Ala Leu Ser Arg Arg Ala Arg Arg
      275         280         285
      Leu Ala Val Arg Met Arg Ala Leu Glu Ser Ser Gln Arg Pro Arg Gly
      290         295         300
      Ser Pro Arg Pro Arg Ser Gln Asn Asn Ile Tyr Ser Ala Cys Pro Arg
      305         310         315         320
      Arg Ala Arg Gly Ala Asp Ala Ala Gly Thr Gly Glu Ala Pro Val Pro

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95           325           330           335
96 Gly Pro Gly Ala Pro Leu Pro Pro Ala Pro Leu Gln Val Ser Glu Ser
97           340           345           350
98 Pro Trp Leu His Ala Pro Ser Leu Lys Thr Ser Cys Glu Tyr Val Ser
99           355           360           365
100 Leu Tyr His Gln Pro Ala Ala Met Met Glu Asp Ser Asp Ser Asp Asp
101           370           375           380
102 Tyr Ile Asn Val Pro Ala
103           385           390
105 <210> SEQ ID NO: 3
106 <211> LENGTH: 73
107 <212> TYPE: PRT
108 <213> ORGANISM: Homo sapiens
109 <400> SEQUENCE: 3
110 Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
111           1           5           10           15
112 Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
113           20           25           30
114 Thr Asn Phe Ile Lys Ala Glu Trp Lys Gly Arg Val Thr Leu Lys Gln
115           35           40           45
116 Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
117           50           55           60
118 Ser Asp Ser Gly Val Tyr Ala Cys Gly
119           65           70
121 <210> SEQ ID NO: 4
122 <211> LENGTH: 79
123 <212> TYPE: PRT
124 <213> ORGANISM: Homo sapiens
125 <400> SEQUENCE: 4
126 Leu Ser Leu Thr Cys Thr Val Ser Gly Ser Thr Phe Ser Asn Asp Tyr
127           1           5           10           15
128 Tyr Thr Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile Gly
129           20           25           30
130 Tyr Val Phe Tyr His Gly Thr Ser Asp Asp Thr Thr Pro Leu Arg Ser
131           35           40           45
132 Arg Val Thr Met Leu Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Arg
133           50           55           60
134 Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
135           65           70           75
137 <210> SEQ ID NO: 5
138 <211> LENGTH: 73
139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
141 <400> SEQUENCE: 5
142 Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser Asn
143           1           5           10           15
144 Tyr Ala Asn Trp Val Gln Gln Lys Pro Asp His Leu Phe Thr Gly Ile
145           20           25           30
146 Gly Gly Thr Asn Asn Arg Ala Pro Gly Val Pro Ala Arg Phe Ser Gly

```

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147      35          40          45
148 Ser Leu Ile Gly Asn Lys Ala Ala Leu Thr Ile Thr Gly Ala Gln Thr
149      50          55          60
150 Glu Asp Glu Ala Ile Tyr Phe Cys Ala
151      65          70
153 <210> SEQ ID NO: 6
154 <211> LENGTH: 72
155 <212> TYPE: PRT
156 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 6
158     Thr Ser Leu Asn Cys Thr Phe Ser Asp Ser Ala Ser Gln Tyr Phe Trp
159     1           5           10          15
160     Trp Tyr Arg Gln His Ser Gly Lys Ala Pro Lys Ala Leu Met Ser Ile
161     20          25          30
162     Phe Ser Asn Gly Glu Lys Glu Gly Arg Phe Thr Ile His Leu Asn
163     35          40          45
164     Lys Ala Ser Leu His Phe Ser Leu His Ile Arg Asp Ser Gln Pro Ser
165     50          55          60
166     Asp Ser Ala Leu Tyr Leu Cys Ala
167     65          70
169 <210> SEQ ID NO: 7
170 <211> LENGTH: 75
171 <212> TYPE: PRT
172 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 7
174     Val Thr Leu Arg Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp
175     1           5           10          15
176     Tyr Arg Gln Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn
177     20          25          30
178     Asn Asn Val Pro Ile Asp Asp Ser Gly Met Pro Glu Asp Arg Phe Ser
179     35          40          45
180     Ala Lys Met Pro Asn Ala Ser Phe Ser Thr Leu Lys Ile Gln Pro Ser
181     50          55          60
182     Glu Pro Arg Asp Ser Ala Val Tyr Phe Cys Ala
183     65          70          75
185 <210> SEQ ID NO: 8
186 <211> LENGTH: 74
187 <212> TYPE: PRT
188 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 8
190     Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His
191     1           5           10          15
192     Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe
193     20          25          30
194     Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg
195     35          40          45
196     Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys
197     50          55          60
198     Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu

```

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Input Set : N:\paola\US09651150B.raw  
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199      65          70
201 <210> SEQ ID NO: 9
202 <211> LENGTH: 80
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
205 <400> SEQUENCE: 9
206     Ala Lys Met Ser Cys Glu Ala Lys Thr Phe Pro Lys Gly Thr Thr Ile
207     1           5           10          15
208     Tyr Trp Leu Arg Glu Leu Gln Asp Ser Asn Lys Asn Lys His Phe Glu
209     20          25          30
210     Phe Leu Ala Ser Arg Thr Ser Thr Lys Gly Ile Lys Tyr Gly Glu Arg
211     35          40          45
212     Val Lys Lys Asn Met Thr Leu Ser Phe Asn Ser Thr Leu Pro Phe Leu
213     50          55          60
214     Lys Ile Met Asp Val Lys Pro Glu Asp Ser Gly Phe Tyr Phe Cys Ala
215     65          70          75          80
217 <210> SEQ ID NO: 10
218 <211> LENGTH: 76
219 <212> TYPE: PRT
220 <213> ORGANISM: Homo sapiens
221 <400> SEQUENCE: 10
222     Val Thr Ile Thr Cys Pro Phe Thr Tyr Ala Thr Arg Gln Leu Lys Lys
223     1           5           10          15
224     Ser Phe Tyr Lys Val Glu Asp Gly Glu Leu Val Leu Ile Ile Asp Ser
225     20          25          30
226     Ser Ser Lys Glu Ala Lys Asp Pro Arg Tyr Lys Gly Arg Ile Thr Leu
227     35          40          45
228     Gln Ile Gln Ser Thr Thr Ala Lys Glu Phe Thr Val Thr Leu Lys His
229     50          55          60
230     Leu Gln Leu Asn Asp Ala Gly Gln Tyr Val Cys Gln
231     65          70          75
233 <210> SEQ ID NO: 11
234 <211> LENGTH: 84
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
237 <220> FEATURE:
238 <221> NAME/KEY: MISC_FEATURE
239 <222> LOCATION: (6)..(51)
240 <223> OTHER INFORMATION: "Xaa" at positions 6-7, 9-18, 20, 22, 25-32, 34-35, 37-48
and 50
241     -51 can be any amino acid.
242 <220> FEATURE:
243 <221> NAME/KEY: MISC_FEATURE
244 <222> LOCATION: (53)..(53)
245 <223> OTHER INFORMATION: "Xaa" at position 53 can be Phe, Val, or Ile.
246 <220> FEATURE:
247 <221> NAME/KEY: MISC_FEATURE
248 <222> LOCATION: (54)..(76)
249 <223> OTHER INFORMATION: "Xaa" at positions 54-65, 71, and 73-76 can be any amino
acid.
250 <220> FEATURE:

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RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 6,7,9,10,11,12,13,14,15,16,17,18,20,22,25,26,27,28,29,30  
Seq#:11; Xaa Pos. 31,32,34,35,37,38,39,40,41,42,43,44,45,46,47,48,50,51,53  
Seq#:11; Xaa Pos. 54,55,56,57,58,59,60,61,62,63,64,65,71,73,74,75,76,79,80  
Seq#:11; Xaa Pos. 82  
Seq#:25; Xaa Pos. 3,4,6

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:11; Line(s) 240,249

## VERIFICATION SUMMARY

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Input Set : N:\paola\US09651150B.raw  
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L:4 M:270 C: Current Application Number differs, Wrong Format  
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:16  
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:32  
L:265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:48  
L:267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:64  
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:80  
L:409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0